

BY LAURA OLENIACZ

DURHAM — Local scientists told their congressman that federal funding cuts are endangering the economy and the future of innovation.

The researchers' concerns about federal funding bubbled over at a roundtable discussion held at the National Institute of Environmental Health Sciences in Durham's Research Triangle Park on Monday.

The event was held to showcase local research projects supported by the institute, which is a unit of the National Institutes of Health that backs projects geared toward preventing environment-caused health problems.

Linda Birnbaum, director of the institute, said the event came at a time when the NIH — and the institute — are feeling the effects of a 1 percent budget cut in the current fiscal year. She said the event was held to inform the public and political officials of the economic impacts of institute-backed research.

"They don't understand how research is an economic driver," she said.

Birnbaum said the institute made grants of more than \$21 million in the Triangle area in fiscal year 2010, and employs almost 1,400 people. The 1 percent funding cut in this fiscal year has resulted in frozen positions and fewer grant awards, she said.

"We're all very concerned about what's going to happen in Fiscal Year 2012," she said.

Monday's event included presentations by representatives from University of North Carolina at Chapel Hill, Duke University, and RTI International, as well as by Heather Patisaul, an assistant

professor at N.C. State University.

Patisaul said the majority of her lab's research is funded by the institute. She gave a presentation on her lab's work in into the impact of the chemical Bisphenol-A and the plant compound genistein on the sexual development of rats and mice.

She said both BPA — which is found in the apoxy lining of metal cans, polycarbonate plastics and other products — as well as the compound genistein, found in soy, both tend to cause early puberty and compromise the ovulation cycles of the female animals studied.

Patisaul said the compounds act like hormones that impact sexual development. The lab has published data showing that exposure to the compounds in animals at critical points in their development can compromise fertility and cause other effects later in the lives of the animals.

Now they're trying to understand the specific molecular and cellular mechanisms by which those effects can occur, she said. The work could have implications for understanding trends in human development, such as the onset of early puberty in girls.

"If we can understand the mechanisms, we can understand if humans face a similar risk," Patisaul said.

She said that the 1 percent cut to the institute has left her lab down one graduate student.

"And that's one less person who gets trained," she said.

Representative David Price, D-4th, a speaker at the event, said there is scrutiny at the federal level of budget priorities, and said he believes it's important to communicate the impact of research on the economy.

Price said the event was originally scheduled to be held in July, but was pushed back because of the federal debt debates.

"We are in the midst of a national debate of our national priorities, and a lot's riding on whether we get it right," he said. "I think it's extremely important to understand that your good works do not always necessary speak for themselves," he added.